

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

Please cancel original claims 1-15 and substitute the following claims 16-30 in lieu thereof.

Original claims 1-15 (canceled without prejudice or disclaimer)

Claim 16. (New) A method for the regeneration of denox catalysts with reduced activity based on the accumulation of phosphorous and phosphorous compounds, comprising the steps of:

(i) treating the catalysts with a substantially aqueous solution of water-soluble, alkalinely reacting alkaline earth salts, ammonium hydroxide or alkalinely reacting ammonium salts or water-soluble organic amines with a pH between approximately 2.5 and 5.5,

(ii) neutralizing excess alkali by a subsequent treatment with inorganic or organic acids, and

(iii) treating the catalyst with an ultrasonic treatment or treating the catalyst with low-frequency oscillations in the reaction solution, so that regeneration of the denox catalysts is effected.

Claim 17. (New) The method according to Claim 16, wherein the water-soluble alkalinely reacting alkaline earth salts, ammonium hydroxide or alkalinely reacting ammonium salts or water-soluble organic amines alkaline earth hydroxides or water-soluble salts are selected from the group consisting of acetates, carbonates or oxalates, ammonium acetate, ammonium carbonate, ammonium oxalate or amines, and methylamines.

Claim 18. (New) The method according to Claim 16, which comprises the further step of, following step (i), neutralizing the remaining alkali by forming water-soluble salts of organic or inorganic acids.

Claim 19. (New) The method of claim 18, wherein the water-soluble salts of organic or inorganic acids are selected from the group consisting of phosphoric acid, sulfuric acid, oxalic acid, citric acid, malonic acid, formic acid, acetic acid, tartaric acid, chloroacetic acid, benzene sulfonic acid and sulfanylic acid.

Claim 20. (New) The method according to Claim 16, which comprises the further step of adding anionic, cationic, amphoteric, non-ionic or zwitterionic surfactants are added to the alkaline treatment solution of step (i) and to the acidic treatment solution of step (ii).

Claim 21. (New) The method according to Claim 20, wherein the surfactants are used in amounts between 0.01 to 0.1 weight percent.

Claim 22. (New) The method according to Claim 16, wherein step (i) takes place at temperatures ranging between room temperature to 100°C.

Claim 23. (New) The method according to Claim 16, which comprises the further step or steps of moving the catalyst in the reaction solution of step (i) during the exposure time, and/or maintaining the acidic or alkaline reaction solutions in movement.

Claim 24. (New) The method according to Claim 23, wherein the catalyst is moved by lifting and/or the reaction solutions are maintained in movement by agitation or recirculation.

Claim 25. (New) The method according to Claim 16, wherein the low-frequency oscillations are used with 20 to 1000 Hz and ultrasound is used with 10,000 to 100,000 Hz.

Claim 26. (New) The method according to Claim 25, wherein the ultrasound is used with from approximately 20,000 to 50,000 Hz.

Claim 27. (New) The method according to Claim 16, wherein step (i) and the ultrasonic treatment of step (iii) are carried out successively in separate basins.

Claim 28. (New) The method according to Claim 16, which comprises the further step or steps of subjecting the catalyst to a mechanical pretreatment to remove fine dust, and/or subjecting the catalyst to a pretreatment with water.

Claim 29. (New) The method according to Claim 16, which comprises the further step after step (ii) of washing the catalyst with water and drying the catalyst.

Claim 30. (New) The method according to Claim 29, which comprises the further step after washing the catalyst with water and drying the catalyst, of re-impregnating the activator elements with water-soluble compounds.